

Version With Markings to Show Changes Made

In the Specification, the following changes have been made:

At page 5, paragraph 20:

--(Amended) When an axial force is applied to pin 35 in a direction that would withdraw it from opening 27, the normal force generates a frictional force opposing such a withdrawal force. This frictional force tends to hold pin within opening 27 and restrain it from being withdrawn. At the same time, the contact between fingers 20, 21, 23 and 25, and pin [27] 35 establishes an electrical connection between connector 11 and pin [27] 35, and thus between the electrical element in chip 13 connected to connector 11 and the electrical device connected to pin 35.--

In the Claims, the following changes have been made:

--1. (Amended) A connector chip for electrically connecting [a chip and] a conductive contact pin thereto, comprising:

[the chip being comprised of] a nonconducting top layer [,] ;

a nonconducting bottom layer [, and] ;

a conductive sheet situated [in] between the top layer and the bottom layer; and

[the chip including] a passageway extending at least partially [therethrough; and] through the chip, the passageway including means for holding the pin in contact with the sheet and for restraining the pin from translating with respect to the chip.--

--2. (Amended) The electrical connector chip as defined in Claim 1 wherein:

the holding means includes means for applying a frictional force against the pin, whereby a withdrawal of the pin from the passageway is resisted.--

--3. (Amended) The electrical connector chip as defined in Claim 2 wherein:

the pin has a lateral side; and

the holding means includes means for applying a normal force against the side, whereby the frictional force is generated when a force is applied to the pin in a direction that would, in the absence of the frictional force, withdraw the pin from the passageway.--

--4. (Amended) The electrical connector chip as defined in Claim 2 wherein:

the passageway includes an opening through the sheet; and

the opening has a breadth that increases when the pin is inserted therethrough.--

--5. (Amended) The electrical connector chip as defined in Claim 4 wherein:

the passageway is further comprised of a top hole through the top layer, and a bottom hole through the bottom layer; and

the top hole, the bottom hole and the opening are aligned.--

--6. (Amended) The electrical connector chip as defined in Claim 5 wherein:

the opening, when unstressed, has an unstressed minimum breadth;

the pin is cylindrical and has a diameter;

the unstressed minimum breadth is smaller than the diameter of the pin;

the opening has a periphery; and

the sheet is comprised of a flexible material so that the periphery can deflect into the bottom hole when the pin is inserted into the opening.--

--7. (Amended) The electrical connector chip as defined in Claim 5 wherein the sheet is composed of a flexible material so that the breadth varies responsive to the contact pin being inserted therethrough.--

--8. (Amended) The electrical connector chip as defined in Claim 7 wherein:
the breadth varies between an unstressed minimum breath and a stressed breath,
with the stressed breath being greater than the unstressed minimum breath;
the contact pin has a diameter greater that the unstressed minimum breadth; and
the breadth increases to the stressed breadth in response to the contact pin being inserted into the opening.--

--9. (Amended) The electrical connector chip as defined in Claim 8 wherein the opening is formed by a plurality of fingers extending centripetally from a section of the sheet that circumscribes the opening.--

--10. (Amended) The electrical connector chip as defined in Claim 8 wherein:
the top hole has a top hole diameter and the bottom hole has a bottom hole diameter;
and
the top hole diameter is smaller that the bottom hole diameter.--

--11. (Amended) The electrical connector chip as defined in Claim 1 comprising means for preventing rotation of the pin with respect to the chip.--

--12. (Amended) The electrical connector chip as defined in Claim 1 further comprising:

a plurality of passageways through the chip; and

a harness including a plurality of the pins spatially arranged so that each of the pins can be simultaneously aligned with one of the passageways, respectively, whereby

all of the pins can be simultaneously inserted into passageways, respectively, and

the harness is prevented from translating or rotating relative to the chip by the holding means when the contact pins are respectively inserted into the passageways.--

--13. (Amended) The electrical connector chip as defined in Claim 12 wherein:

each holding means is electrically isolated from the other holding means and is electrically connected to a respective chip element, whereby

each chip element is electrically connected to a respective contact pin when the contact pins are respectively inserted into the passageways.--

--14. (Amended) The electrical connector chip as defined in Claim 1 wherein:

the chip is from 0.5 to 2.0 millimeters thick; and

the sheet is from 0.05 to 0.2 millimeters thick.--

--15. (Amended) A connector chip for electrically connecting [a chip and] a conductive contact pin thereto, comprising:

[the chip including] a nonconducting top layer [,] ;

a nonconducting bottom layer [, and] ;

an electrical element; and

a conductive sheet situated [in] between the top layer and the bottom layer, and being electrically connected to the element;

the top layer having a top hole therethrough, and the bottom layer having a bottom hole therethrough, with the top hole and the bottom hole being in alignment and comprising an aligned hole pair;

the sheet having an opening aligned with the aligned hole pair; and

the opening including means for holding the pin in contact with the sheet when the pin is inserted into the opening, whereby

the pin is prevented from translating with respect to the chip and an electrical connection between the pin and the element is established and maintained.--

--16. (Amended) The electrical connector chip as defined in Claim 15 wherein:

the chip is from 0.5 to 2.0 millimeters thick; and

the sheet is from 0.05 to 0.2 millimeters thick.--

--17. (Amended) The electrical connector chip as defined in Claim 15 comprising:

a plurality of the aligned hole pairs and openings; and

a harness including a plurality of the pins spatially arranged so that each of the contact pins can be simultaneously aligned with one of the aligned hole pairs and openings, whereby

each of the contact pins can be simultaneously inserted into one of the aligned hole pairs and openings, respectively, and

the harness is held stationary relative to the chip by the holding means when the pins are inserted.--

--23. (New) A connector of a chip of a type having a passageway extending at least partially therethrough, for electrically connecting a conductive contact pin to the chip, the connector comprising:

a conductive sheet having a peripheral portion connected to the chip adjacent the passageway, and means extending from the peripheral portion into the passageway for holding a pin in contact with the sheet and for restraining the pin from translating with respect to the chip.--

--24. (New) The electrical connector as defined in Claim 23 wherein:

the holding means includes means for applying a frictional force against the pin, whereby a withdrawal of the pin from the passageway is resisted.--

--25. (New) The electrical connector as defined in Claim 24 wherein:

the pin has a lateral side; and

the holding means includes means for applying a normal force against the side,

whereby the frictional force is generated when a force is applied to the pin in a direction that would, in the absence of the frictional force, withdraw the pin from the passageway.--

--26. (New) The electrical connector as defined in Claim 24 wherein:

the holding means includes an opening through the sheet; and

the opening has a breadth that increases when the pin is inserted therethrough.--

--27. (New) The electrical connector as defined in Claim 26 wherein:

the opening, when unstressed, has an unstressed minimum breadth;

the pin is cylindrical and has a diameter;

the unstressed minimum breadth is smaller than the diameter of the pin;

the opening has a periphery; and

the sheet is comprised of a flexible material so that the periphery can deflect into the bottom hole when the pin is inserted into the opening.--

--28. (New) The electrical connector as defined in Claim 26 wherein the sheet is composed of a flexible material so that the breadth varies responsive to the contact pin being inserted therethrough.--

--29. (New) The electrical connector as defined in Claim 28 wherein:

the breadth varies between an unstressed minimum breath and a stressed breath,
with the stressed breath being greater than the unstressed minimum breath;
the contact pin has a diameter greater than the unstressed minimum breadth; and
the breadth increases to the stressed breadth in response to the contact pin being
inserted into the opening.--

--30. (New) The electrical connector as defined in Claim 29 wherein the opening is formed
by a plurality of fingers extending centripetally from a section of the sheet that circumscribes
the opening.--

--31. (New) The electrical connector as defined in Claim 23 comprising means for
preventing rotation of the pin with respect to the chip.--

--32. (New) The electrical connector as defined in Claim 23 wherein:
the sheet is from 0.05 to 0.2 millimeters thick.--